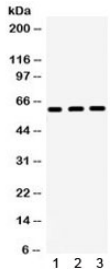
HNF1 beta Antibody / HNF1B (R32080)

Catalog No.	Formulation	Size
R32080	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P35680
Applications	Western blot: 0.1-0.5ug/ml
Limitations	This HNF1 beta antibody is available for research use only.



Western blot testing of 1) rat liver, 2) rat kidney, 3) human SW620 lysate with HNF1 beta antibody. Predicted/observed molecular weight ~61 kDa.

Description

HNF1 beta antibody, also known as HNF1B antibody, recognizes Hepatocyte nuclear factor 1 beta, a homeodomain-containing transcription factor encoded by the human HNF1B gene located on chromosome 17q12. HNF1 beta is a member of the HNF1 family of transcription regulators and plays a central role in organ development and epithelial cell differentiation. HNF1 beta is predominantly localized to the nucleus, where it regulates gene expression programs involved in kidney, liver, pancreas, and genitourinary tract development. HNF1 beta antibody is widely used in research investigating developmental biology and epithelial lineage specification.

Hepatocyte nuclear factor 1 beta contains a dimerization domain, a POU-specific DNA-binding domain, and a transactivation domain that enables regulation of target gene transcription. HNF1 beta functions as a homodimer or heterodimer with HNF1 alpha, binding to specific promoter regions to control genes involved in epithelial transport, metabolism, and organ morphogenesis. HNF1B expression is critical during embryogenesis, particularly in nephrogenesis and pancreatic development. HNF1 beta antibody supports studies examining transcriptional regulation and epithelial differentiation pathways.

HNF1 beta is strongly expressed in renal tubular epithelial cells, bile duct epithelium, pancreatic ducts, and certain reproductive tract epithelia. Alterations in HNF1B are associated with developmental disorders, including renal cysts and diabetes syndrome, and mutations in HNF1B have been linked to congenital anomalies of the kidney and urinary tract. In tumor research, nuclear HNF1 beta expression has been studied in ovarian clear cell carcinoma and certain renal neoplasms, where it serves as a lineage-associated marker in research settings. HNF1 beta antibody enables evaluation of nuclear localization and epithelial cell differentiation status.

Beyond developmental and oncologic contexts, HNF1B participates in regulation of genes controlling glucose metabolism, ion transport, and epithelial polarity. Dysregulation of HNF1B activity may contribute to metabolic and structural abnormalities in affected tissues. HNF1 beta antibody supports investigation of transcriptional control mechanisms and organ-specific gene regulation in health and disease.

Application Notes

Optimal dilution of the HNF1 beta antibody should be determined by the researcher.

Immunogen

Amino acids AQQPFMAAVTQLQNSHMYAHKQEPPQYSHT of human HNF1 beta were used as the immunogen for the HNF1 beta antibody.

Storage

After reconstitution, the HNF1 beta antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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